REMARKS/ARGUMENTS

After the foregoing Amendment, claims 1-23 and 34 are currently pending in this application. Claims 24-33 have been canceled without prejudice or disclaimer. Claims 1-6, 8, 11-13, 16-18, 20, 23 and 34 have been amended to more distinctly claim subject matter which the Applicant regards as the invention. Applicant submits that no new matter has been introduced into the application by these amendments.

Claim Rejections - 35 USC §102(e)

Claims 1-4 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,714,909 to Gibbon et al. (hereinafter "Gibbon").

With respect to claim 1, the multimedia data is divided into a plurality of first semantic units and at least one second semantic unit. The first semantic unit can be presented to a user as a smallest meaningful unit for searching for multimedia data. The second semantic unit includes at least two first semantic units and is associated with keywords of first semantic units that are included in the second semantic unit such that the second semantic unit can be presented to a user upon the keyword-based search. The user controls a granularity of the

keyword-based search result with the same keyword by selecting the level of search as one of the first semantic unit and the second semantic unit.

As shown in Figure 1 of the present invention, the multimedia data is divided into a plurality of first semantic units, (actions) and at least two first semantic units are included in a second semantic unit (module). Each first semantic unit is associated with a keyword and each second semantic unit is associated with keywords of the first semantic units that are included in the second semantic unit. Either first semantic units or second semantic units are presented to the user as a search result based on the search level selected by the user. A user selects the granularity of the search results by designating the level of search as the first semantic unit or the second semantic unit. If the user selects a first semantic unit as the search level, the search results are generated in the first semantic unit level, (i.e., the search results will be generated with the smallest units of data). If the user selects a second semantic unit as the search level, the search results are generated in the second semantic unit level, (i.e., the search results will be generated with bigger units of data). Therefore, the user can control the granularity of the search results, (i.e., the length or amount of data in each search result).

Gibbon fails to disclose such a scheme. In Gibbon, multimedia data is segmented into a plurality of segments based on semantic differences, a topic of multimedia events are identified using the segmented text, and a summary of the multimedia events are generated such that a user may playback a segment with the identified content information for each segment. Figure 13 of Gibbon shows an example of semantic structure. Different semantics of the multimedia data are categorized in the form of a table of contents, (e.g., commercials and news stories). If a user clicks on the button of the desired item, the selected multimedia segment is played.

The Examiner asserts that Gibbon discloses a hierarchical data structure of first semantic units and second semantic units. The portion cited by the Examiner reads as follows:

> The goal is to extract three classes of semantics: news stories, augmented stories (augmented by the introduction of the story by the anchor), and news summary of the day. (See column 10 lines 46-48).

The three classes of semantics, news stories, augmented stories and news summary do not correspond to the first and second semantic units of claim 1 of the present invention. In accordance with claim 1 of the present invention, the first semantic units are the smallest meaningful units of the multimedia data and the second

semantic unit includes <u>at least two different first semantic units</u> and the second semantic unit can be separately presented to the user as a search result.

In Gibbon, the augmented story comprises a story and an introduction related to the story. Therefore, the two portions of the augmented story, (i.e., the story and the introduction), are basically the same information and do not comprise two different smallest meaningful units. The augmented story does not comprise two different stories. Therefore, the augmented story does not correspond to the second semantic unit of claim 1. In addition, the augmented story is not presented to the user separately as a search result. As shown in Figure 13 of Gibbon, the stories, news summary and commercials are displayed and the user may playback these items. Gibbon fails to disclose that the augmented story is presented to the user as a separate search result. In contrast, in accordance with claim 1 of the present invention, the second semantic unit can be presented to the user as a search result in response to the user's selection.

In addition, the news summary does not correspond to the second semantic unit. The news summary does not include two or more news stories. The news summary is generated with data extracted from a plurality of stories to provide a brief summary of the stories. In contrast, the second semantic unit of claim 1 of the

present invention includes two or more first semantic units, not the brief summaries of the two or more first semantic units.

Moreover, Gibbon fails to disclose that the user may control the granularity of the search results, (i.e., the length or the amount of data of each search result). In accordance with claim 1 of the present invention, if the user selects a first semantic unit as a search level, the search results are generated in a first semantic unit level and, therefore, each search result includes the smallest meaningful data. If the user selects a second semantic unit as a search level, the search results are generated in a second semantic unit level and, therefore, each search result includes bigger meaningful data. Gibbon fails to disclose that the user can control the length or size of each search result by selecting the search level.

Gibbon fails to disclose a second semantic unit including at least two first semantic units that can be presented to the user as a search result based on the user's selection and the user can select the granularity of the search results by designating the level of search between the first semantic unit and the second semantic unit. Therefore, Claims 1-4 are not anticipated by Gibbon.

Claims 5-23 and 34 have been rejected under 35 U.S.C. §103(a) as being obvious over Gibbon in view of numerous references. The main reference, Gibbon, fails to disclose a second semantic unit including at least two first semantic units

that can be presented to the user as a search result based on the user's selection and the user can select the granularity of the search results by designating the level of search between the first semantic unit and the second semantic unit. Therefore, it is believed that claims 5-23 and 34 are not obvious over Gibbon for the same reasons stated above.

In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application, including claims 1-23 and 34, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Chung Tae Kim

By

John C. Donch, Jr.
Registration No. 43,593

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103
Telephone: (215) 568-6400
Facsimile: (215) 568-6499

JCD/YBH/klw